CPES-IC Sample Size Recommendations

When conducting a patient experience survey, it's important to do so in a way that ensures the responses you receive represent your patient population. This will allow you to

- · Use the data for quality improvement and comparative reporting
- Make meaningful statements about patient experiences

So, it's important to account for response rates and send out enough surveys. But what's the right sample size for your needs?

To help, the Canadian Institute for Health Information (CIHI) has developed minimum sample size recommendations for the <u>Canadian Patient Experiences Survey — Inpatient Care</u> (CPES-IC). We developed them at the request of hospitals and jurisdictions, following our own data analyses. They align with survey sampling best practices and the <u>CPES-IC Procedure Manual</u>.

Rationale

From looking at Canadian Patient Experiences Reporting System (CPERS) data, we've observed that

- The number of respondents to a given question or measure is directly related to the width of the confidence interval
- Having fewer respondents results in wider confidence intervals and less chance of detecting significant differences between hospitals/jurisdictions and their comparators
- Having wide confidence intervals can make it more difficult to identify meaningful opportunities
 for quality improvement, to assess whether new programs or initiatives are working, and to
 track changes over time at the hospital level

The following page provides some examples of sampling guidelines, as well as special considerations when using disproportionate stratified random sampling (DSRS).





Minimum number of surveys

- For hospitals with more than 1,200 discharges per year
 - Sample a minimum of 1,200 patients.
 - Assuming a 25% response rate, this threshold should allow you to collect 300 completed surveys — a sufficient volume to inform quality improvement and benchmarking activities.
 If your response rate is lower, you'll need to send out additional surveys.

Special considerations for hospitals that use disproportionate stratified random sampling

We strongly recommend that you keep the number of strata you use to a minimum.

On average, hospitals that use DSRS use 5 strata. Hospitals with more than 15 strata per year tend to have very wide confidence intervals. This may impact their ability to identify meaningful differences within the hospital, over time and across organizations.

For stability, we recommend that you have a minimum of 30 completed surveys for each stratum (though this is not mandatory).

- For hospitals with 1,200 or fewer discharges per year
 - Aim to receive as close to 300 completed surveys as possible, using an attempted census sampling approach.

Publishing results

We publicly report results for hospitals with 30 or more completed surveys in our <u>Your Health System web tool</u> (In Brief and In Depth). We also report them in the private <u>CPES: Comparative Results tool</u> (accessed through a login). We include results for hospitals with fewer than 30 completed surveys only in the CPES: Comparative Results tool.



© 2023 Canadian Institute for Health Information

How to cite this document:

Canadian Institute for Health Information. *CPES-IC Sample Size Recommendations* [job aid]. Ottawa, ON: CIHI; 2023.